Design of an E-learning course for the students on the Faculty for Pedagogy

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Abstract

E-learning is becoming the alternative form of education in the higher education and business world. It is defined as: every method involving teaching or educating by means of computer network for distribution, interaction and facilities. It makes a shift in the whole learning paradigm, placing the student in the center of the learning process. Within our research project, we have developed an E-learning course titled "Introduction of E-learning concepts with practical applications". In this paper we will provide the goals and draft contents of the course, as a first step in the strategy for bringing this technology closer into our higher education institutions.

Introduction

Computer supported learning, with easy Internet access, provides valuable assistance to the whole community. Developing computer technology especially for the World Wide Web creates a great challenge for the learning process and its implementation in the global environment. Every higher education institution has been trying to explore available tools and technology for the students. However, strategies and the learning processes are varying across the culture, country and age.

The motivation to create a sound, introductory course in E-learning concepts for our students, emerged after a survey we carried out among a significant number of school teachers, from the primary and secondary schools in the Republic of Macedonia. In order to get a broader picture of their attitudes and perceptions we explored their abilities, capabilities, expectations, literacy in the utilization of computers and Internet. Their answers were ambiguous and sometimes contradictory. Most disturbing, the teachers don't recognize the necessity of the new technologies in the teaching process, or they don't see the connection of computer skills to classroom learning.

The issues concerning the role of the teacher and the position of the institutions in the new era are neither trivial, nor can be resolved over night. There is an evident lack of a unique strategy or program for Information and Communication Technologies (ICT) introduction and its use in our schools. That places the root of the problem within the institutions of higher education for the future teachers, different pedagogy faculties and similar schools within the educational system. The curriculum in ICT should be revised and restructured. It should establish a unity of cooperation and exchange of ideas between all the actors in the process: university lecturers, students and teachers on the field. Those links should be created and maintained through sound practical work. Adequate training for teachers in technology utilization emerges as a primary goal of our educational system. Training programs that involve in-class experience and on-the-job performance will make redefine teacher-learner role and gain their sense of control over technology.

E-learning strategy elements

A shift to on-line learning is a shift towards a new learning culture. It is not a short term project. There are many key elements that should be taken into consideration when developing an e-learning strategy for your institution [1]. Following are some of them.

Business case: Align your E-learning strategy with the strategic goals of your institution and make a solid case in terms of the outcomes.

Organizational readiness: As for any strategic decision, this is essential to the success of this major shift.

Benchmarking: One should explore the best practices in this technology as well as lessons learned by those who are experienced in this area.

E-learning options: The strategy should consider all potential aspects of the new learning technologies available: online courses, portals, knowledge management, collaboration tools, synchronous courses (with learners online at the same time) or asynchronous (with learners online at the different times), etc. Even if you one step at a time it is recommended to have a longer time strategy.

Technology choice: Issues to be considered include infrastructure, platforms, bandwidth, delivery methods, internal and external hosting, application services, etc.

People resources: Experienced internal trainers may be able to be involved in online course design, content development and course tutoring. Otherwise, one should consider external contractors and additional expertise.

Learner assessment: A learning assessment and testing strategy, measuring the progress during courses should be developed (pre-tests, quizzes, post-tests).

Measuring success: In addition of the most used models for measuring training results, new criteria are emerging for evaluating online learning like interactivity, navigation and other.

Quality factors: Different attributes and assessment framework developed by Edith Cowan University Quality Online Working Group describe the essential components of quality online learning materials. Pedagogies used, resources, delivery strategies with corresponding attributes are some of the factors for evaluation of the quality of the learning materials. Also, checklists have been developed for use in evaluation to determine the areas of strength and weakness [2].

Design of an E-learning course

Taking into consideration the socio/economic context, the technology resources and infrastructure available, the role of the teacher and the position of the educational institutions in our setting, we propose a step-by-step strategy for introduction of E-learning methods. Any uncritical adoption of technology to different educational settings has been proven as counterproductive. Because of the perceived benefits which technology can bring, there is a danger that the whole education becomes captive to problematic use of technologies. In our proposed strategy, we consider the central issue of E-learning: motivation. How do the students and teachers respond to the learning material and what is the best way to keep them motivated?

Designing a long-established program in a very new direction requires patience, planning and persistence. There are issues of management, instructor and student support that must be addressed. It is vital that all the key players are involved in the process. Also, it is recommended that the courses should be reviewed by experts in the field to ensure their relevancy and academic value.

The course development process [3] that follows such policy is shown in Figure 1.

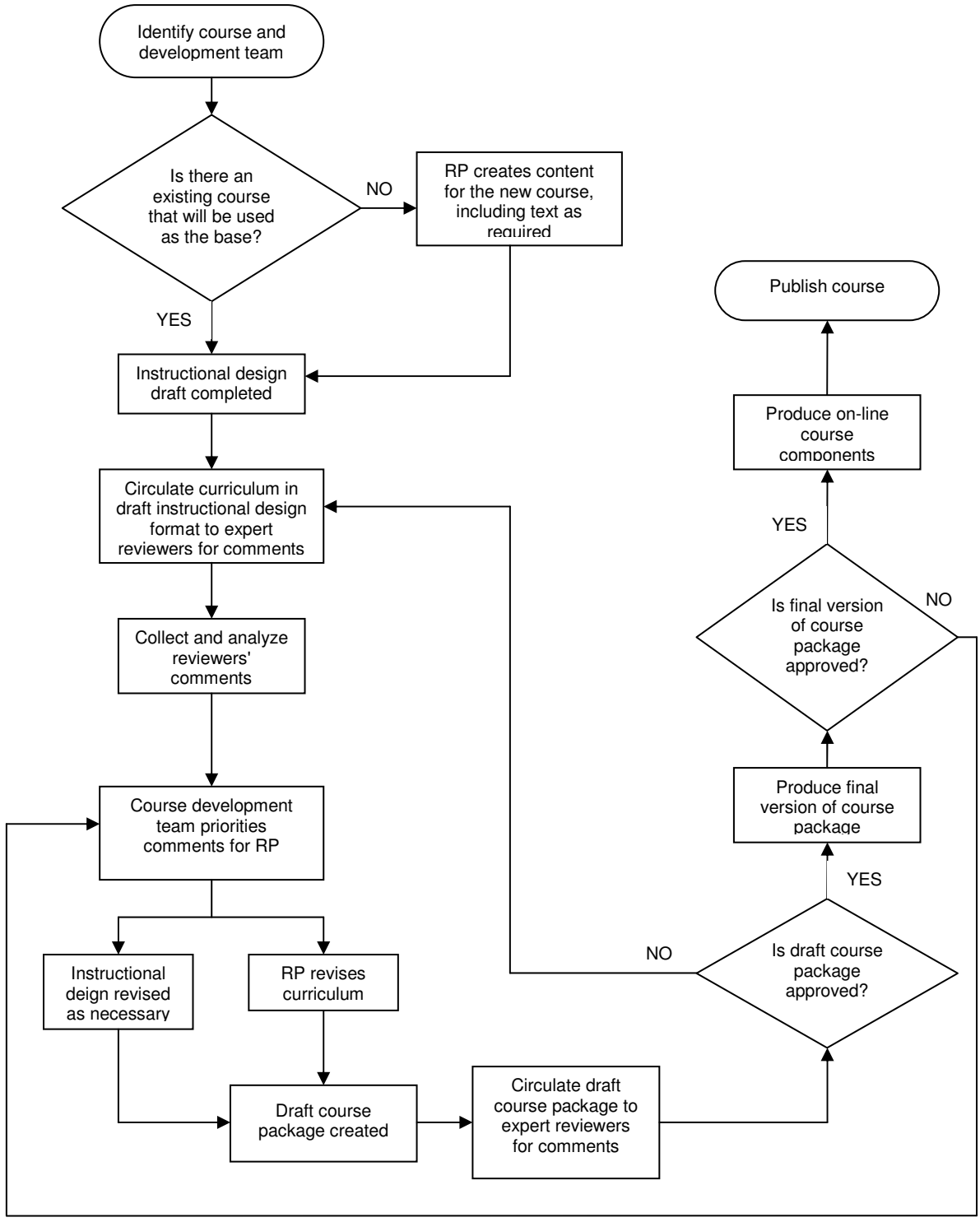

Figure 1. Course development process flowchart

Goals, objectives and draft content of our E-learning course

In this course students will learn to develop an electronic learning environment. They will create web pages and website, search for relevant information, present the material on the Internet. Because E-learning has more possibilities than the traditional learning from books, they

can study and find new subject matter and additional information very rapidly. They can make exercises and communicate with their teachers and among them, independent of time and place.

The role of the teacher will be to:

-provide the content
-give instructions
-give feedback
-motivate students
-assess and evaluate students

The objective of this course is to enable students to acquire knowledge and insight in the design of ICT. At the end, the students should be able to create their own HTML pages, make a simple educational design and build interaction into their pages. They can also upload pages to a web server. In the structure, the most important elements of a learning environment (goals, content, instruction, content-related feedback and evaluation) will be included.

After each chapter, they have one to two exercises to fulfill.

Here is a very short description of the content of the chapters:

Chapter1: *Introduction*

This chapter explains some standard programs (Word, Excel, Internet Explorer, Paint, Paint Shop Pro, Notepad, WinZip) needed to create web pages and to edit and send documents. They create folders and storage of files, placing images in a text, pack and send documents.

Chapter 2: *Internet and Educational websites*

The students will be introduced in the Internet concept; they will investigate a possibility to get a free E-mail and space. The students will also have to answer a number of questions and the answers can be found on the Internet. They will explore special educational sites like www.teachnet.com and others related in order to get ideas and plans for lessons.

Chapter 3: *Effective E-learning*

E-learning was introduced in the late nineties with Internet and E-mail. In this chapter, the options, methodologies, different technologies and the effect of instruction with computers and Internet are investigated and students learn from reviews of research in this field.

Chapter 4: *Creating Web pages with HTML*

The students learn how to use Hypertext Mark-up Language. In five short exercises they should be able to create a simple code. It is important to know this language to solve problems that may occur when using other programs that generate HTML codes, like Word. Students will make their own web page with images and links to other pages and sources on Internet.

Chapter 5: *Instructional design for World Wide Web*

Here the students are prepared for their final exercise: creating an educational website. Five basic principles are described on how a website should be designed. Also, findings from the cognitive theory of learning are used.

Chapter 6: *Creating an educational website for E-learning*

The last task is the creation of a short E-learning course. They have to prepare a presentation with help of Internet resources. Applying the previous knowledge of creating web pages and designing educational material, they design a website where other students can choose topic. The Internet must be used to gather information about the topics. They can finally collect and arrange information and prepare the presentations. The learning target is to develop a small but useful educational website, appropriate for E-learning.

Conclusions

The impact of Internet on students' culture is not hard to measure. The teachers would need to come to terms with it to understand their students' world. Technological literacy must include a wide range of opportunities for students to interact with the new technologies in order to develop a level of competence for their productive work in the future.

The first step into adoption of modern technologies could be bringing the Web into the courses. Web is not just helpful to education, but if used effectively, it can change revolutionary the students' learning. The design and introduction of a course for E-learning basics is an advanced step in our traditional training of teachers in new technologies. It brings their knowledge and skills well above using computers only as an alternative way of fulfilling administrative and operational tasks. It gives them an idea of qualitatively new approach in the learning process. Through E-learning, the teachers and the students can interact in the learning process and expand their creativity by reforming the traditional instructional practice. It also creates an excellent opportunity for the students to be creative, motivated and self-confident over the emerging new technologies.

References

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